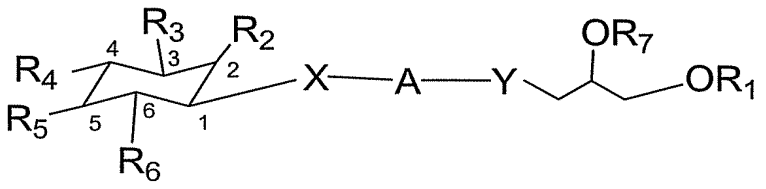
AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A compound of the formula I:



(I)

or a pharmaceutically acceptable salt thereof;

wherein X and Y are independently selected from the group consisting of O, CF_2, CH_2, and CHF;

wherein A is P(O)OH;

R_2 is selected from the group consisting of H, OH, C_1-C_{25} alkyloxy, C_6-C_{10} aryloxy, C_3-C_8 cycloalkyloxy, C_3-C_8 cycloalkyl C_1-C_6 alkoxy, C_2-C_{22} alkenyloxy, C_3-C_8 cycloalkenyloxy, C_7-C_{32} aralkyloxy, C_7-C_{32} alkylaryloxy, C_9-C_{32} aralkenyloxy, and C_9-C_{32} alkenylaryloxy;

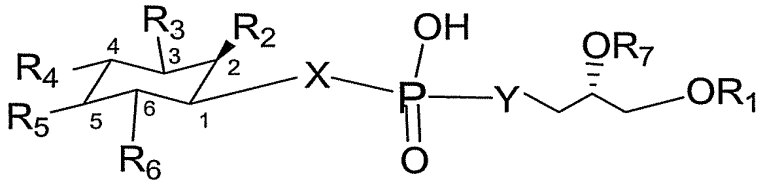
R_3-R_6 are independently selected from the group consisting of H and OH; and

R_1 and R_7 are independently selected from the group consisting of C_1-C_{25} alkyl, C_6-C_{10} aryl, C_3-C_8 cycloalkyl, C_2-C_{22} alkenyl, C_3-C_8 cycloalkenyl, C_7-C_{32} aralkyl, C_7-C_{32} alkylaryl, C_9-C_{32} aralkenyl, and C_9-C_{32} alkenylaryl;

with the provisos that (i) when X is O, Y is O or CH_2, and R_3 is H, at least one of R_2 and R_4-R_6 is not OH; (ii) all of R_2-R_6 are not simultaneously H; (iii) R_5 and R_4 are not simultaneously H; [[and]] (iv) R_2, R_3, R_5, and R_6 are not simultaneously OH or H; and (v) when X and Y are O, R_1 is $C_{18}H_{37}$, and only one of R_2 and R_6 is OCH_3, then R_3 and R_5 are not simultaneously OH.

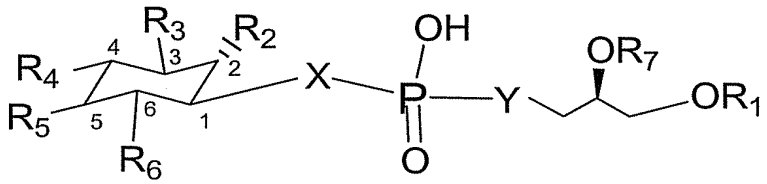
2. (Canceled)

3. (Previously Presented) The compound of claim 1, which has the formula Ia:



(Ia).

4. (Previously Presented) The compound of claim 1, which has the formula Ib:



(Ib).

5. (Currently Amended) The compound of claim 1, wherein X and Y are O.

6. (Previously Presented) The compound of claim 1, wherein R_1 is a C_1-C_{25} alkyl.

7. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{10}-C_{25} alkyl.

8. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{15}-C_{20} alkyl.

9. (Previously Presented) The compound of claim 1, wherein R_1 is a C_{18} alkyl.

10. (Previously Presented) The compound of claim 1, wherein R_7 is a C_1-C_{25} alkyl.

11. (Previously Presented) The compound of claim 1, wherein R_7 is a C_1-C_{15} alkyl.

12. (Previously Presented) The compound of claim 1, wherein R_7 is a C_1-C_5 alkyl.

13. (Previously Presented) The compound of claim 1, wherein R_7 is methyl.

14. (Previously Presented) The compound of claim 1, wherein R_2 is C_1-C_{25} alkyloxy.

15. (Previously Presented) The compound of claim 1, wherein R_2 is C_1-C_{15} alkyloxy.

16. (Previously Presented) The compound of claim 1, wherein R_2 is C_1-C_5 alkyloxy.

17. (Previously Presented) The compound of claim 1, wherein R_2 is methoxy.

18. (Previously Presented) The compound of claim 1, wherein R_2 is C_7-C_{32} aralkyloxy.

19. (Previously Presented) The compound of claim 1, wherein R_2 is cyclohexylmethoxy.

20. (Previously Presented) The compound of claim 1, wherein R_2 is H.

21. (Previously Presented) The compound of claim 1, wherein R_3 is H.

22. (Previously Presented) The compound of claim 1, wherein R_4 is H.

23. (Previously Presented) The compound of claim 1, wherein R_5 is H.

24. (Previously Presented) The compound of claim 1, wherein R_6 is H.

25. (Previously Presented) The compound of claim 1, wherein R_2 and R_3 are H.

26. (Previously Presented) The compound of claim 1, wherein R_3 and R_4 are H.

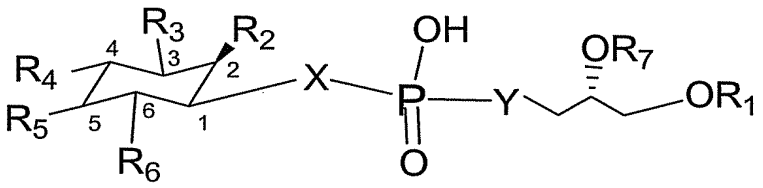
27. (Previously Presented) The compound of claim 1, wherein R_5 and R_6 are H.

28. (Original) The compound of claim 3, wherein X and Y are O, R_1 is $C_{18}H_{37}$, and R_7 is methyl.

29. (Original) The compound of claim 28, wherein R_2 is methoxy, R_3 is H, and R_4-R_6 are OH.

30. (Original) The compound of claim 28, wherein R_2-R_3 are H and R_4-R_6 are OH.

31. (Currently Amended) ~~The compound of claim 28,~~ A compound of the formula:

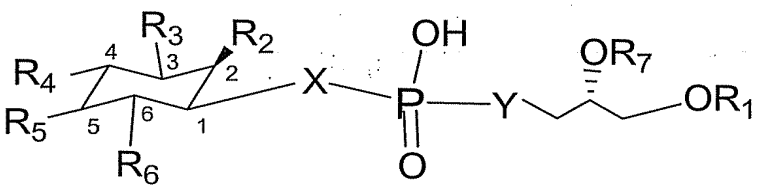


wherein X and Y are O, R_1 is $C_{18}H_{37}$, and R_7 is methyl; and R_2-R_3 and R_5-R_6 are OH and R_4 is H.

32. (Original) The compound of claim 28, wherein R_2 is i-butyloxy, R_3 is H, and R_4-R_6 are OH.

33. (Original) The compound of claim 28, wherein R_2 is cyclohexylmethoxy, R_3 is H, and R_4-R_6 are OH.

34. (Currently Amended) ~~The compound of claim 28,~~ A compound of the formula:



wherein X and Y are O, R_1 is $C_{18}H_{37}$, R_7 is methyl, R_2-R_3 and R_6 are OH, and R_4-R_5 are H.

35. (Original) The compound of claim 28, wherein R_2-R_4 and R_6 are OH and R_5 is H.

36. (Original) The compound of claim 28, wherein R_2, R_4, and R_6 are OH and R_3 and R_5 are H.

37. (Previously Presented) A pharmaceutical composition comprising a compound of claim 1 and a pharmaceutically acceptable carrier.

38. (Previously Presented) A method of inhibiting activation of the serine/threonine kinase Akt or decreasing phosphorylation in a tumor cell of an animal comprising administering to the animal an effective amount of a compound of claim 1.

39-52. (Canceled)

53. (Previously Presented) A method of increasing apoptosis of a cell comprising contacting the cell with a compound of claim 1.

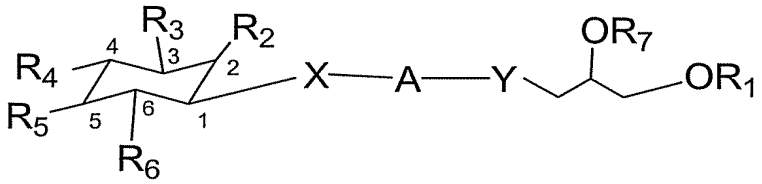
54. (Previously Presented) A method for inhibiting PH domain binding comprising exposing a material containing an PH domain to a compound of claim 1.

55. (Previously Presented) A method for determining the presence of a PH domain in a material comprising:
(a) exposing a sample of said material to a PH domain binding compound and obtaining a first binding result;
(b) exposing another sample of said material to a compound of claim 1 and obtaining a second binding result; and
(c) comparing the first and second binding results to determine whether a PH domain is present in the material.

56. (Currently Amended) A method of treating cancer in a mammal comprising administering to the mammal an effective amount of a compound of claim 1, wherein the cancer is selected from the group consisting of lung cancer, breast cancer, ovarian cancer, colorectal cancer, and brain cancer.

57. (Canceled)

58. (Currently Amended) A compound of the formula I:



(I)

or a pharmaceutically acceptable salt thereof;
wherein X and Y are independently selected from the group consisting of O, CF_2, CH_2, and CHF;

wherein A is P(O)OH; ~~independently selected from the group consisting of P(O)OH, CHCOOH, and C(COOH)$_2$;~~

R_2 is selected from the group consisting of C_1-C_{25} alkyloxy, cyclohexylmethoxy, and C_7-C_{32} aralkyloxy;

R_3-R_6 are independently selected from the group consisting of H, OH, isosteres of OH; and

R_1 and R_7 are independently selected from the group consisting of C_1-C_{25} alkyl, C_6-C_{10} aryl, C_3-C_8 cycloalkyl, C_2-C_{22} alkenyl, C_3-C_8 cycloalkenyl, C_7-C_{32} aralkyl, C_7-C_{32} alkylaryl, C_9-C_{32} aralkenyl, and C_9-C_{32} alkenylaryl;

with the provisos that (i) when X is O, Y is O or CH_2, and R_3 is H, at least one of R_2 and R_4-R_6 is not OH; (ii) ~~when A is CHCOOH or C(COOH)$_2$, X and Y cannot be simultaneously O; and (iii)~~ all of R_2-R_6 are not simultaneously H; and when X and Y are O, R_1 is $C_{18}H_{37}$, and only one of R_2 and R_6 is OCH_3, then R_3 and R_5 are not simultaneously OH.

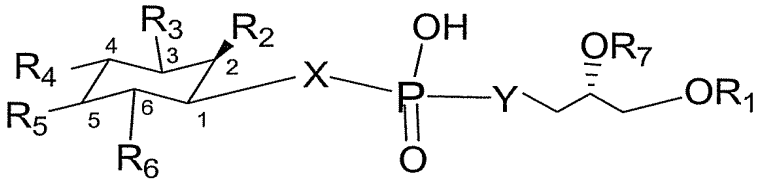
59. (Previously Presented) The compound of claim 58, wherein R_2 is C_1-C_{25} alkyloxy.

60. (Previously Presented) The compound of claim 58, wherein R_2 is C_7-C_{32} aralkyloxy.

61. (Previously Presented) The compound of claim 58, wherein R_2 is cyclohexylmethoxy.

62. (Previously Presented) The compound of claim 58, wherein R_3 and R_4 are H.

63. (Previously Presented) The compound of claim 58, which has the formula Ia:



(Ia)

wherein X and Y are O, R_1 is $C_{18}H_{37}$, R_7 is methyl, R_2 is methoxy, R_3 is H, and R_4-R_6 are OH.

64. (Previously Presented) A method of increasing apoptosis of a cell comprising contacting the cell with a compound of claim 58.

65. (Previously Presented) A method for inhibiting PH domain binding comprising exposing a material containing an PH domain to a compound of claim 58.

66. (Previously Presented) A pharmaceutical composition comprising a compound of claim 58 and a pharmaceutically acceptable carrier.

67. (Currently Amended) A method of treating cancer in a mammal comprising administering to the mammal an effective amount of a compound of claim 58, wherein the cancer is selected from the group consisting of lung cancer, breast cancer, ovarian cancer, colorectal cancer, and brain cancer.

68. (Previously Presented) A method of inhibiting activation of the serine/threonine kinase Akt or decreasing phosphorylation in a tumor cell of an animal comprising administering to the animal an effective amount of a compound of claim 58.

69. (Canceled)

70. (New) A pharmaceutical composition comprising a compound of claim 31 and a pharmaceutically acceptable carrier.

71. (New) A pharmaceutical composition comprising a compound of claim 34 and a pharmaceutically acceptable carrier.